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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,719	09/25/2003	Wataru Yamada	117322	6414

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EXAMINER	
DOTE, JANIS L	

ART UNIT	PAPER NUMBER
1756	

DATE MAILED: 09/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/669,719	YAMADA ET AL.	
	Examiner	Art Unit	
	Janis L. Dote	1756	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 August 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3 and 5-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1,2,5,6 and 8-12* is/are allowed.

6)☒ Claim(s) *3 and 7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 January 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. A request for continued examination (RCE) under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submission filed on Aug. 26, 2005, has been entered.

2. The examiner acknowledges the amendments to claims 1, 2, and 5, and the cancellation of claims 13-15 set forth in the amendment filed on Jul. 26, 2005, which was entered upon the filing of the RCE on Aug. 26, 2005. Claims 1-3 and 5-12 are pending.

3. The rejections under 35 U.S.C. 102(b) over Japanese Patent 2001-100447 (JP'447) of claims 1-3, 5, 6, 11, and 12, and of claims 1-3, 5-7, 11, and 12, set forth in the final Office action mailed on Apr. 26, 2005, paragraphs 9 and 10, respectively, have been withdrawn in response to the amendments to claims 1, 2, and 5 set forth in the amendment filed on Jul. 26, 2005, which was entered upon the filing of the RCE on Aug. 26, 2005. The amendments to claims 1, 2, and 5 add the

limitations of now-cancelled claims 13-15 that the divalent group Y in formula (1) "is at least one selected from a group consisting of $-C_nH_{2n}-$, $-C_nH_{2n-2}-$, $-C_nH_{2n-4}-$, $-C_6H_4-$, $-C_6H_4-C_6H_4-$, -NH-, $-C_nF_{2n}-$, -COO-, -S-, -O-, and -N=CH-, where n represents an integer from 1 to 15, provided that when a divalent group containing -S-, -NH- and -O- is used for Y, such a group is used in combination with a group containing a carbon atom to constitute a divalent group containing at least one carbon atom in its main chain." As discussed in paragraphs 9 and 10, JP'447 teaches siloxane resins that are obtained by reacting the compound (Si-1) with other components. The compound (Si-1) meets the compositional limitations of formula (1) recited in instant claims 1, 2, and 5, but for the Y divalent group. The Y divalent group in the JP'447 compound (Si-1) is $-CH_2CH_2$-phenylene-N(phenyl)-phenylene-CH_2CH_2-. The groups $-CH_2CH_2-$ and phenylene are within the scope of the Markush group recited in instant claims 1, 2, and 5. However, the group -N(phenyl)- is not within the scope of the Markush group recited in instant claims 1, 2, and 5. JP'447 does not teach or suggest siloxane resins having the structure of formula (1) comprising the Y divalent group recited in instant claims 1, 2, and 5.

4. The disclosure is objected to because of the following informalities:

The use of trademarks, e.g., Sumilizer [sic: SUMILIZER] in Table 2 at page 76, of the specification, has been noted in this application. The trademarks should be capitalized wherever they appear and be accompanied by the generic terminology. This example is not exhaustive. Applicants should review the entire specification for compliance.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Appropriate correction is required.

Applicants' arguments filed on Aug. 26, 2005, have been fully considered but they are not persuasive.

Applicants assert that the amendments filed on Jul. 26, 2005, and on Aug. 26, 2005, to the specification overcome the objection.

However, for the reasons discussed in the above objection, those amendments did not capitalize all the trademarks disclosed in the specification. Accordingly, the objection stands.

5. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

In claim 7, the term "aluminum chelate compound" lacks antecedent basis in the originally filed specification. See page 51, lines 20-21, of the specification, which discloses that the metal chelate compound can be an "organic aluminum compound" (emphasis added). The term "aluminum chelate compound" recited in instant claim 7 is broader than the disclosure in the originally filed specification, because it encompasses aluminum chelate compounds that are not organic.

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claim 3 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim contains subject matter which was not described in the specification in such a way as to reasonably convey to one

skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Instant claim 3 recites that "at least one of Ar^1 or Ar^5 [of formula (4)] is bonded to R^1 in general formula (2)."

The originally filed specification does not provide an adequate written description of said limitation. The originally filed specification at page 13, lines 7-9, discloses, and originally filed claim 3 recites that "at least one of Ar^1 or Ar^5 [of formula (4)] has a bonding hand with R^1 in general formula (2)." The originally filed specification does not define what is meant by the phrase "a bonding hand," which is not a common term in the chemical arts. Applicants have not indicated where in the originally filed specification there is antecedent basis for the limitation recited in instant claim 3.

Applicants' arguments filed on Jul. 26, 2005, and on Aug. 26, 2005, have been fully considered but they are not persuasive.

Applicants allege that "one of ordinary skill in the art understands that the term 'bonding hand' means 'is bonded to,' especially in Japan." Applicants refer to excerpts from one US published application of record and from three US patents to support their position.

Applicants' arguments are not persuasive. Applicants have not indicated where in the original specification, by page number and line number, there is antecedent basis for the term "bonding hand" to mean "is bonded to" as recited in instant claim 3. Moreover, there is no objective evidence in the present record to support applicants' allegation that applicants' definition of the term "bonding hand" is an acceptable definition in the art. Applicants have not provided any objective evidence showing that the term "bonding hand" recited in instant claim 3 means "is bonded to" as alleged by applicants, e.g., in the form of a standard textbook or a Rule 132 declaration from an expert in the art showing that the definition of the term "bonding hand" is indeed that alleged by applicants. Furthermore, contrary to applicants' response, copies of the excerpts from the three patents are not present in the application. Paragraph 0042 in US Published Patent publication 2004/0086794 A1 (US'794) merely states that one of the groups Ar "has a bonding hand to connect with" the group $-D-SiR_{3-a}Q_a$. US'794 does not define the term "bonding hand." There is no objective evidence in the present record to show that the term "bonding hand" in US Published Patent Application US'794, would have had the same definition as the term "bonding

hand" used in the instant specification as alleged by applicants. Accordingly, the rejection of claim 3 stands.

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 3 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by US 2004/0086794 A1 (Yamada).

Yamada discloses an electrophotographic photoreceptor comprising a conductive support, a charge generation layer, a charge transport layer, and an uppermost layer comprising a siloxane resin that meets the compositional limitations recited in instant claim 3. Example 1 in paragraphs 0120-0124. The uppermost layer is obtained by forming a coating solution and coating the solution on the charge transport layer. The coating solution comprises compound (VI-3), compound (III-3), the metal chelating compound aluminum trisacetylacetonate, and the multidentate ligand acetylacetone. Table 1 at page 3, compound (III-3); page 18, compound (VI-3); and paragraph 0124. Compound (VI-3) comprises a hydroxyl ethyl group and a triphenylamine group that meet the compositional limitations of formula (3) and formula (4), respectively, recited in instant claim 7 and claim 3. Compound (III-3) is

$(MeO)_2MeS-(CH_2)_6-(Me)Si(OMe)_2$, where Me represents a methyl group and the group MeO- is the hydrolytic group. Compound (III-3) meets the compositional limitations of formula (1) recited in instant claims 3 and 7. Aluminum trisacetylacetonate meets the metal chelating compound limitation recited in instant claim 7. The hydrolytic group MeO- in compound (III-3) reacts with the hydroxyl group in compound (VI-3) to form the linkage $-\overset{|}{\underset{|}{Si}}-O-(CH_2)_2$-triarylamine moiety of compound (VI-3). The resulting siloxane resin comprises units of $-(Me)\overset{|}{\underset{|}{Si}}-(CH_2)_6-(Me)\overset{|}{\underset{|}{Si}}-$, which meet the compositional limitations of formula (1) recited instant claims 3 and 7, and units of $-\overset{|}{\underset{|}{Si}}-O-(CH_2)_2$-triarylamine moiety of compound (VI-3), which meet the compositional limitations of formula (2), recited in instant claim 3. Thus, the resulting siloxane meets the compositional limitations recited in instant claim 3. The method of making said uppermost layer disclosed by Yamada meets the steps recited in instant claim 7.

Applicants' arguments filed on Jul. 26, 2005, and on Aug. 26, 2005, have been fully considered but they are not persuasive.

Applicants assert that Yamada is not prior art because they have perfected their claim foreign priority under 35 U.S.C. 119 to Japanese patent application No. 2003-081472 by filing a

verified English-language translation of said document on Jul. 26, 2005.

However, the translation does not provide an adequate written description of the subject matter recited in instant claims 3 and 7 as required under 35 U.S.C. 112, first paragraph, for the following reasons:

(1) In claim 3, the limitation "at least one of Ar^1 or Ar^5 [of formula (4)] is bonded to R^1 in general formula (2)" (emphasis added) lacks antecedent basis in the translation. Applicants have not indicated where in the translation, by page number and line number, there is antecedent basis for said limitation. The translation at page 3, lines 9-11, discloses that "at least one of Ar^1 or Ar^5 [of formula (4)] has a bonding hand with R^1 in general formula (2)." See the discussion in paragraph 7 above.

(2) In claim 7, the limitation "aluminum chelate compound" lacks antecedent basis in the translation. The translation at page 60, line 18, discloses that the metal chelate can be an "organic aluminum compound." The term "aluminum chelate compound" recited in instant claim 7 is broader than the disclosure in the translation because it encompasses aluminum chelate compounds that are not organic compounds.

Applicants, in the response filed on Aug. 26, 2005, assert that the translation in paragraph 122 discloses that "the organic aluminum compound may preferably be an aluminum chelate compound" and that that disclosure clearly supports the method recited in instant claim 7.

However, applicants' review of the disclosure in paragraph 0122 of the translation assertion appears to agree with the examiner's review of the translation that the translation discloses organic aluminum chelate compounds, and does not support the broadly recited term "aluminum chelate compound" recited in instant claim 7.

Accordingly, applicants have not perfected their claim to foreign priority for the subject matter recited in instant claims 3 and 7.

10. Claims 1, 2, 5, 6, and 8-12 are allowed over the prior art of record for the reasons discussed in paragraph 3, supra, which are incorporated herein by reference.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janis L. Dote whose telephone number is (571) 272-1382. The examiner can normally be reached Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Mark Huff, can be reached on (571) 272-1385. The central fax phone number is (571) 273-8300.

Any inquiry regarding papers not received regarding this communication or earlier communications should be directed to Supervisory Application Examiner Ms. Claudia Sullivan, whose telephone number is (571) 272-1052.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JANIS L. DOIE
PRIMARY EXAMINER
GROUP 1500
1700

JLD
Sep. 12, 2005